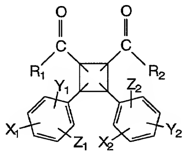
CLAIMS

1. An analgesic agent comprising as an active ingredient a cyclobutanedicarboxylic acid derivative, containing substituted diphenyl, represented by formula (I):



(I)

wherein X_1, X_2, Y_1, Y_2, Z_1, and Z_2, which may be the same or different, each independently represent a hydrogen atom, hydroxyl, a halogen atom, alkyl, alkoxy, or a nitrogen-containing group; and R_1 and R_2, which may be the same or different, each independently represent hydroxyl, a halogen atom, alkoxy, aryloxy, terpeneoxy, saccharide, or a nitrogen-containing group.

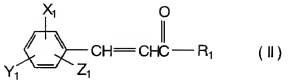
2. The analgesic agent according to claim 1, wherein, in formula (I), $X_1 = X_2$, $Y_1 = Y_2$, and $Z_1 = Z_2$.

3. The analgesic agent according to claim 1 or 2, wherein any one of X_1, Y_1 and Z_1 and any one of X_2, Y_2 and Z_2 both represent hydroxyl or a halogen atom while the remaining groups represent a hydrogen atom.

4. The analgesic agent according to any one of claims 1 to 3, wherein R_1 and R_2 each independently represent hydroxyl, methoxy, or nitrophenoxy.

5. A process for producing a cyclobutanedicarboxylic acid derivative for the analgesic agent according to any one of claims 1 to 4, said process comprising the steps of:

providing a cinnamic acid derivative represented by formula (II)



(II)

wherein X_1, Y_1, and Z_1, which may be the same or different, each independently represent a hydrogen atom, hydroxyl, a halogen atom, alkyl, alkoxy, or a nitrogen-containing group; and R_1 represents hydroxyl, a halogen atom, alkoxy, aryloxy, terpeneoxy, saccharide, or a nitrogen-containing group; and

dispersing the derivative in an organic solvent and then irradiating the dispersion with light to allow photodimerization to proceed.